

Zion National Park Irrigation System,
Pine Creek Canal
Zion National Park
Springdale vicinity
Washington County
Utah

HAER No. UT-38-C

HAER
UTAH,
27-SPDA.V,
2C-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
Department of the Interior
P.O. Box 25287
Denver, Colorado 80225

HISTORIC AMERICAN ENGINEERING RECORD

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Location: Zion National Park
Springdale vicinity, Washington County, Utah

Date of Construction: c. 1890s; Alterations - 1934

Architect/Designer: Harry Langley

Present Owner: National Park Service
U. S. Department of the Interior

Present Use: Irrigation Canal

Significance: Although inoperable, the canal retains much of its structural integrity. It has representative examples of pioneer rockwork, water delivery system artifacts, and remnants of Civilian Conservation Corps engineering involvement along its 2-1/2 mile course.

Researcher: James Jurale
October 5, 1984

The Pine Creek Canal, which originally drew water off Pine Creek immediately to the northeast of its confluence with the Virgin River, ran to the south at the foot of a talus slope and sent laterals to the west to irrigate the 2-1/2 mile by 1/2 mile "island" of farmland located between the east bank of the Virgin River and Bridge Mountain. In 1934, the canal's headworks were extended approximately 1/4 mile to the north to augment Pine Creek's sometimes inadequate water supply with water diverted from the Virgin River. Located on the east bank of the Virgin River, approximately 1/4 mile to the north of the Virgin River Bridge, the extant remains of the headworks which were completed in 1934 by Civilian Conservation Corps enrollees consist of a 15-foot diameter red sandstone boulder with steel rods and 2-inch steel beams that have been drilled by the "juniors" of Camp NP2. The extant remains of the extension flume over Pine Creek include sections of steel cable and steel pipe supports, and an approximately 2-ton sandstone boulder with two concrete patties on its surface--one inscribed, 1934, the other with N.F.

Sections of "dry" random rubble, pioneer-built, rock retaining walls which supported the canal bed are apparent, as well as water delivery system artifacts, such as the well-preserved remains of a 15-foot-long stave pipe flume constructed of oak slats, and wire rings with an 18-inch diameter, which conveyed water over a gulch located approximately 1/8 mile to the south of Pine Creek. The sketchy remains of an associated irrigation system, the Flanigan Ditch, which reportedly took off from a boulder dam on the west side of the Virgin River opposite the Superintendent's House and was flumed to the east bank, are also found in the area.

The work conducted in 1934 was under the supervision of Zion National Park Resident Landscape Architect, Harry Langley, and directed on-site by Landscape Architect, A. M. Doerner, and Civil Works Project Landscape Architect, George W. Norgard. In September 1934, Harlan B. Stephensen, Landscape Architect on leave from Bryce National Park, was in charge of removing the dead cottonwoods from the banks of the canal between the mouth of Pine Creek and the South Entrance Area.

Bibliography

Langley, Harry. "Report to Chief Architect, Branch of Plans and Design, Western Division, December 31, 1934."

Zion National Park Photo Collection, Negative No. 316 Z10.